

operations, may be overlooked or disregarded—it may be well to remark in a word, and it needs but a word, that, wherever union by the first intention is looked for, the edges of the wound must be kept in close contact; and that, if this be skillfully done, it is of far less consequence by what peculiar contrivance it is effected. If sutures are used, more depends upon their proper adjustment, and their having the exact amount of tightening requisite, than upon the material. A metallic suture, of whatsoever or whomsoever's make, if imperfectly secured or too tightly tied, will prove as ineffectual or will cut its way out as certainly as that made of silk or flax. A delicate thread, even of cotton, properly adjusted, will retain its place, cause as little irritation, and leave as small a scar, as we have often had occasion to notice in operations about the face, as the purest silver, the softest iron, or the most polished steel. Let each operator, then, use whichever suture, knot, or fastener he himself chooses or can, in a given case, best manage, just as he would select any particular form of scissors or knife for paring the opening; but let him not forget the principles on which he must depend for success. The former, though perhaps not the best, may answer if adroitly used, but a neglect of the latter will result in inevitable failure. And having, by such a course, been successful, let him not, in his report of the case, as is too often done, wholly ignore the first demonstrator of these principles—an act of simple justice; while magnanimity would suggest an honourable mention.

The position of the patient during the operation is of some consequence, though it may occasionally be varied to suit the convenience, or even the whim, of the operator. Dr. Hayward adopted that of lithotomy, which has many advantages. The fistulous opening, naturally thrown forward by this position, can thus without difficulty be brought by the staff nearly or quite to the os externum, and the subsequent steps of the operation thereby greatly facilitated. In this way too, an assistant, on either side, can with one hand keep the leg in proper position, and with the other separate the labia with a suitable spatula, without being in the way of the operator, who stands in front of the patient. Besides, the patient is in the most comfortable posture for a prolonged operation, and can thus take ether when and as long as desirable.

The catheter for after use, contrived by Dr. Hayward, is, to say the least, quite as good as any of its imitations; while its advantages are the plate which enables it to be secured by a bandage, and the screw which allows the additional portion to be turned in any desired direction, or to be removed at pleasure.

Much more might be added, but enough has been said for the present purpose, which is, simply, a short exposition of the principal improvements, based on which, the operation for vesico-vaginal fistula is hereafter to become one of the successful operations of surgery. Having had the opportunity to be present and to assist in the earlier cases, I can bear testimony to the difficulties encountered, and to the original as well as successful means adopted to surmount them—a grateful testimony to the merited eminence of a faithful instructor and steadfast friend.—*Boston Med. and Surg. Journ.*, July 11, 1861.

*Affection of Vision from Spinal Irritation.*—The following cases, related (*Berkshire Medical Journal*, July, 1861) by Dr. A. H. ROBINSON, of Concord, N. H., are highly interesting, though so far as we can judge, from the very imperfect account of the symptoms, the disease from which the patients suffered, seems to be improperly designated amaurosis.

“About two years ago, my attention was called to the case of two young ladies—sisters—who, while attending school at an institution in this county, were both attacked with symptoms of *amaurosis*; which became so severe as to force them to leave school, and live secluded from the light. At the time of my first seeing them, these girls had been some months under treatment, and their health had in a measure improved. *The lower cervical and upper dorsal vertebrae in each were exceedingly tender on pressure*; and as this tenderness abated under local treatment, the pain in the eyes and the intolerance of light subsided; and as the soreness of the spine increased, so did the amaurotic symptoms; and thus the one appeared to be the mark of the severity of the other.

“A few months after seeing these young ladies, my own son, a lad of eleven

years of age, attending one of the schools in this city, began to complain seriously of his eyes. They 'watered' badly, and at times flashes of light darted through them, while the words of his book so ran together that he could not read. The intolerance of light was such as to prevent his enduring a bright sun, or the light of the gas in his room: and the pain in the eyes was so severe, even in the dark, as to prevent his sleeping. His appetite failed, he became emaciated; and the somewhat dilated, but mobile pupils, the drooping eyelids, the pallid countenance, and, in short, the general aspect of the case was so much like the two first, that from curiosity I examined his spine, and found in the same place the same excessive tenderness as in the others. I then took him from school, forbidding his looking at a book, and kept him secluded from all bright light. I applied croton oil to the spine, and gave him blue mass as an alternative, while he took thrice, daily, lupuline and rhubarb, with super-carbonate of soda. This was the main medicinal treatment, and as the irritation of the spine began to abate, the amanrotic symptoms diminished. He could not, however, for nearly or quite a year, read fine print, without the aid of glasses suitable to persons fifty years of age, although words printed in a large, coarse type were readily made out. In about fifteen months after commencing treatment, my son returned to school, and now he can read the finest print without difficulty, and without the aid of glasses, has no pain of the eyes, no unnatural appearance of the countenance, and is able to maintain his rank in his class with fair credit to himself. I consider him cured of his amaurosis."

*Action of Chloroform on the Blood—Probable Causes of its Fatal Effects when inhaled as an Anæsthetic.*—Dr. CHAS. T. JACKSON makes some interesting remarks on this subject (*Boston Med. and Surg. Jt.*, March 28, 1861). Six years ago he published a case of death in a healthy young woman, in whom death was produced from inhaling chloroform, preparatory to the extraction of a tooth. The blood taken from the right side of the heart was analyzed, and was found to contain formic acid in considerable quantities, but no chloroform in an undecomposed state. Microscopic examination of the blood, by Dr. J. Bacon, showed that the blood-globules were withered up in a very remarkable manner. Chlorine was also found to be a component of the blood. It was also observed that this blood did not coagulate, nor did the blood-globules subside, but the whole remained a solution, the blood having a cranberry-red colour, like red ink.

Dr. J. states that this blood has been kept in a vial in his office, exposed to temperatures from the freezing point to above 80° for more than six years, and yet it has not decomposed, nor has a single blood-globule settled to the bottom of the vial, nor has the colour changed in the least.

He now calls attention to these remarkable phenomena, which he thinks appear to throw some light on the chemical action which chloroform exerts on the blood. As he views the matter, he considers the chemical action on the blood by inhaled chloroform to be this: "Chloroform consists of one equivalent of formyle and three of chlorine. Formic acid consists of one equivalent of formyle and three of oxygen. When chloroform is inhaled into the lungs, the oxygen is abstracted from the blood, and combining with the formyle makes formic acid, while chlorine combines with the blood as a substitute for oxygen. Thus a portion of the blood becomes chemically changed, disorganized, and rendered unfit for its vital functions. Then, if that portion of the blood contained in the heart, and large vessels, which we may style the immediate working blood of those organs, is vitiated, so as no longer to be an appropriate stimulus to the most vital organs, sudden death is most likely to take place through cessation of their action. Our only surprise should be that death does not more frequently follow from inhalation of this dangerous anæsthetic agent, for the decomposition I have described undoubtedly always takes place to a certain extent, and to a sufficient degree to deoxidize a considerable portion of the blood, and to charge it with chlorine and formic acid.

"It is well known, that deaths more frequently take place in cases where chloroform is administered in minor surgical operations, or in cases where there is no loss of blood, than in larger and bloody operations.